

crispprd 1.0



## Abstract

**Grant Number:** 7R15NR005245-02

**PI Name:** MISSIK, EUGERIA

**PI Title:**

**Project Title:** ESTROGEN, Angina, Activity and Quality of Life in Women

**Abstract:** *DESCRIPTION: Postmenopausal women comprise the largest number of female cardiac patients. Recently recognized vasoactive effects of estrogen have shown to improve coronary blood flow in postmenopausal cardiac women especially during exercise. Our recent pilot study conducted on 37 postmenopausal cardiac women identified some notable trends between women receiving hormone replacement therapy (HRT) and those women not receiving HRT. Women on HRT performed activities of higher intensity for longer periods of time, reported lower severity of angina, and higher quality of life. Studies on the relationship of hormonal status and daily physical activity of cardiac patients are not available. To what extent estrogen replacement therapy (ERT) impacts the daily physical activity of postmenopausal cardiac patients is not known. It is hypothesized that the antischemic effects of estrogen positively impact daily physical activity and quality of life of postmenopausal cardiac women. Therefore, the primary aim of this study is to test a model examining the relationship between ERT use and frequency and severity of angina, daily physical activity, and quality of life. A prospective, comparative and cohort study will be used. Data will be collected on 180 postmenopausal cardiac women at three hospital based cardiac rehabilitation centers in western Pennsylvania. Multiple measures will be used for each construct in the model. Physical activity will be measured by self-report and electronic monitoring using the Tri Trac R3D accelerometer. Angina will be measured by the supplemented Rose Questionnaire, frequency by self-report, and severity by a numerical scale. Quality of life will be measured by using the Medical Outcomes Study, Short Form 36-Items. Structural equation analysis will be used to model the impact of ERT on the dependent variables. A demonstrated positive impact on physical activity may provide an additional rationale for the prudent use of ERT in the optimum management of*

*postmenopausal cardiac patients. Interventions to support the adoption and maintenance of physical activity recommendations by postmenopausal cardiac women are greatly needed.*

***Thesaurus Terms:***

*angina pectoris, estrogen, functional ability, hormone therapy, human therapy evaluation, postmenopause, women's health  
body physical activity, exercise, quality of life  
female, human subject, patient oriented research, questionnaire*

**Institution:** KENT STATE UNIVERSITY AT KENT  
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**Fiscal Year:** 2001

**Department:** NONE

**Project Start:** 01-SEP-2001

**Project End:** 31-AUG-2004

**ICD:** NATIONAL INSTITUTE OF NURSING RESEARCH

**IRG:** NURS

